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# Timeliness of Patient Discharges: A Comparison of the Acute Care Discharge Process for Medical and Surgical Patients

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Timeliness of Patient Discharges: A Comparison of the Acute Care Discharge Process for  
Medical and Surgical Patients

by

Robert Moore

A thesis submitted to the faculty of  
Gardner-Webb University Hunt School of Nursing  
in partial fulfillment of the requirements for the  
Master of Science in Nursing Degree

Boiling Springs, North Carolina

2015

Submitted by:

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Date

## Abstract

Patient flow is becoming increasingly important to the efficient operations of an acute healthcare setting. Multiple factors peaking in their influence on the number of patients seeking healthcare services are on a collision course. When the true impact is felt in healthcare the potential for record numbers of patients to seek acute medical care are high. It is imperative to streamline patient flow processes to ensure healthcare facilities have the ability to provide the care sought by patients in a timely manner. This study's purpose was to assist in increasing the number of patients an acute care facility can provide treatment to, while maintaining the high quality care expected by consumers and regulatory bodies. A thorough literature review was conducted which revealed a lack of information on the timeliness of discharges and the effect this process has on the patient flow process. Two focus groups, one medical and one surgical, were interviewed to get their qualitative responses on the topic of timely discharges and the factors affecting this metric. There were several common themes identified, and many variance identified in this process. In analyzing the variances, process planning can be initiated in an effort to bring about action plans to increase the efficiency of the discharge process in both the medical and surgical specialties.

*Keywords:* patient flow, patient throughput, patient discharge, timely discharge, and hospital discharge.

## Acknowledgments

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## **CHAPTER I**

### **Introduction**

#### **Significance**

Patient flow through the continuum of healthcare services is receiving increasing focus by the healthcare industry to address efficiency, safety, and quality of patient care. As regulations for the provision of care have been tightened and the reimbursement for this care has decreased, many healthcare facilities are struggling to remain financially viable. With the implementation of the Affordable Care Act, it is estimated 32 million Americans will have the ability to obtain health insurance who have previously not had insurance (Forbes, Osborne, Hartsell, & Wall, 2014). With this increase in the number of consumers who will seek access to the healthcare system, healthcare facilities will be placed under additional strain to maximize their bed capacity and increase the efficiency of patient flow.

Medical and surgical inpatient units receive patients from multiple sources: the emergency department (ED), the operating room (OR), physician clinics as direct admissions, and patients from units that provide a higher level of care as transfers in preparation for discharge. There are several references that study and review the flow process from the medical, surgical, ED, and OR perspectives individually, but a lack of evidence exists in which medical and surgical units are studied to identify and analyze the disparity in the length of time it takes to discharge a medical patient versus a surgical patient (Amato-Vealy, Fountain, & Coppola, 2012; Clark, 2005; Cowie & Corcoran, 2012; Forbes et al., 2014; Johnson & Capasso, 2012).

## **Problem Statement**

Through continued focus on patient flow initiatives in 2014, it was recognized by leaders and teammates that there was a disparity in the length of time it takes to discharge a medical patient versus a surgical patient. Results of data collected from medical and surgical units within this 457 bed acute care facility were used to identify this disparity. One of the metrics used to track patient flow efficiency is *discharge within 2 hours of the discharge order*. This metric is specific to nursing as they are the primary group of teammates affecting the timeliness of the discharge after the discharge order is entered in the electronic medical record (EMR) by the attending physician.

For the purpose of this research, five questions related to patient flow will be asked of two focus groups. One focus group will consist of teammates with knowledge and expertise in the discharge process for medical patients, and the other group will consist of like individuals from the surgical divisions within this medium sized acute care facility. The five questions that will be asked are:

1. What are the barriers to a patient discharge?
2. What positive processes are in place to expedite patient discharges?
3. Describe how ancillary departments contribute to the discharge process.
4. What types of services are required by the patient after discharge?
5. What role does a patient's insurance play in the discharge process?

## **Purpose**

The purpose of this research study was to better understand the factors affecting the timeliness in which patients were discharged. The information obtained in this research study will be used by nursing leaders and teammates to implement and improve

the timeliness of patient discharges throughout the medical and surgical divisions at this medium sized acute care facility.

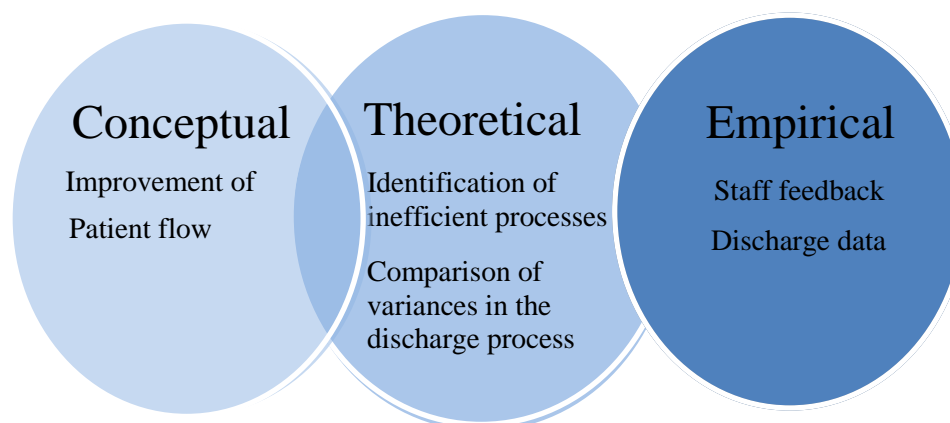
### **Theoretical Framework**

Juran's Trilogy to maintain and improve quality was selected to provide the theoretical underpinnings for this study. Juran's Trilogy for quality improvement consists of three processes: quality planning, quality control, and quality improvement (McEwen & Wills, 2011). Quality planning consists of "building quality into the processes and the product" (McEwen & Wills, 2011, p. 343). Quality control consists of "evaluating actual performance, comparing that performance to predetermined goals, and taking action on the differences" (McEwen & Wills, 2011, p. 343). Quality improvement encourages "attainment of previously unprecedented levels of performance by the organization (McEwen & Wills, 2011, p. 343).

Important conceptual concepts of Juran's Trilogy for process improvement as they relate to this research project are: improving patient flow to allow for the provision of a higher quality of care to a greater number of patients.

The theoretical portions of this research project are: identifying parts of the discharge process that are inefficient and cause delays in the discharging of patients, comparing the variances in the discharge process for medical and surgical patients, and instituting changes in the discharge process that increase patient flow.

The empirical portion of this research project are: interviews with staff who are involved in the discharge process and discharge data. Figure 1 shows the relationship of the conceptual, theoretical, and empirical components of this study using Juran's Trilogy for process improvement.



*Figure 1: Conceptual-Theoretical-Empirical (CTE) Diagram*

### **Research Question**

The research question for this study was: How do key healthcare staff involved in an acute care discharge process describe their experiences and perceived barriers?

### **Definition of Terms**

Patient flow “exists to the extent we add value and decrease waste by increasing benefits and decreasing burdens (or both) as our patients move through the service transitions and queues of healthcare” (Jensen & Mayer, 2015, p. 25).

Boarding is defined by the Joint Commission as “the practice of holding patients in the emergency department or another temporary location after the decision to admit or transfer has been made” (Joint Commission, 2015).

Delayed discharge “(sometimes called delayed transfer or bed blocking) refers to the situation where a patient is deemed to be medically well enough for discharge, but

where they are unable to leave the hospital because arrangements for continuing care have not been finalized” (Bryan, 2010, p. 34).

Throughput is defined by Kobis and Kennedy as “the level of efficiency with which a patient goes through a hospital stay-from admission, to treatment/intervention, to discharge” (Kobis & Kennedy, 2006, p. 90).

### **Summary**

Patient flow, or throughput, is a national problem that exists in almost every acute healthcare facility. Over the last several decades many acute care facilities have closed while the number of patients seeking medical care has increased. The efficiency in which an acute care setting can move patients through the continuum of care while providing the quality of care demanded by patients and regulatory bodies will become increasingly important in the future as our national population continues to age, an increasing number of patients are covered by health insurance, and the demands from regulatory bodies become more stringent. An efficient discharge process in which patients are discharged in a timely manner is imperative to function in this new age of modern healthcare.

By analyzing the different practices and processes used by medical and surgical divisions within an acute care setting, knowledge will be gained to aid in the timely discharge of patients after the discharge order is written by the physician. The discharge process is multifaceted involving many departments within and outside of the acute care setting. By increasing the efficiency in which patients are discharged from the acute care setting, bed capacity will be gained. This increased capacity will allow additional patients to be admitted and cared for decreasing overcrowding of the facility and decreasing the number of boarders in the Emergency Departments (ED).

## **CHAPTER II**

### **Literature Review**

Patient flow is a process, and as with many processes within an industry, it can be efficient or inefficient. If there is an inefficient process within a production industry, it will cause delays to the production of the product. If the patient flow process within an acute care setting is inefficient, it does not cause production delays, but causes multiple serious negative costs to the patients, to the facility, and to the employees. “These range from tangible financial losses to decreases in patient safety, patient satisfaction, physician productivity, and staff satisfaction” (Jensen & Mayer, 2015).

The purpose of this research study was to determine factors that affect the timeliness of patient discharges within the medical and surgical divisions in an acute care facility.

### **Review of Literature**

The sources used in this in-depth literature review were comprised of peer reviewed articles obtained from the John R. Dover Library located at Gardner-Webb University. The literature search was conducted using the Cumulative Index for Nursing and Allied Health Literature and the EBSCO online library using the limitations of peer reviewed, full text, and from the dates of July 2005 to June 2015. One book was also used and was obtained at the most recent Institute for Healthcare Improvement conference held in December 2014.

Keywords that were used in the review of literature included: patient flow, patient throughput, patient discharge, timely discharge, and hospital discharge.

## **Theoretical and Conceptual Literature**

### **Patient Flow**

Patient flow is becoming an ever increasing process that must be addressed in acute care facilities. There are several factors contributing to the importance of patient flow including: patients who are over the age of 65 will grow by 28% over the next 10 years, there will be an increase in the number of patients who come to the ED with an emergent condition requiring critical care, the impact of the Affordable Care Act has given millions more citizens the ability to purchase health care insurance (Jensen & Mayer, 2015).

The increasing number of critical care patients who are admitted to the acute care facility can cause a bottleneck if there are not a sufficient number of medical and surgical beds available in which to transfer these patients to as they become healthy enough to transfer to a lower level of care (Clark, 2005). The impact of an inefficient flow process does not only affect the critical care areas, but also the ability of the acute care facility to place patients in the appropriate inpatient unit (Forbes et al., 2014).

The patient discharge is normally the last step in the patient flow process within an acute care setting. Discharging a patient is a significant factor in the acute care setting's ability to treat new patients as they cannot be placed in a room until another patient is discharged. Often the discharge process governs the efficiency of patient flow, and the placement of new patients is reliant on how efficient the discharge process is (Johnson & Capasso, 2012). One strategy used to assist with the discharge process is to implement discharge planning and establish an anticipated day of discharge (ADOD) on the day of admission (Gilligan & Walters, 2007).



The discharge process is complicated and relies on multiple departments completing their part of the discharge process, before the discharge can actually take place. With the complexity of this process analyzing patient flow as a whole often does not allow the process to be broken down into separate elements. One method used in the review of research was called Portion Control Opportunities (PCO). PCOs “are the identification of smaller, more manageable issues that stem from a larger, broader, overarching issue. It allows the leadership team to concentrate on one key element to make the process change more targeted” (Goldberg & Robbins, 2011, p. 293).

### **Emergency Room Flow**

The number of visits to the ED departments across the nation have continued to increase over time. From 1997 to 2007, the annual number of ED visits increased 23% (retrieved from [www.cdc.gov/nchs/data/nhsr026.pdf](http://www.cdc.gov/nchs/data/nhsr026.pdf)). As the number of ED visits continues to rise, it is placing a greater strain on the ability of acute care facilities to meet the demand that is being placed on them. The result of these increased ED volumes is ED overcrowding and the boarding of patients in the ED while waiting on an inpatient bed to become available.

ED overcrowding and the boarding of patients is greatly affected by the movement of patients on the inpatient units, and is a system problem that is not an isolated issue within the ED itself (Powell et al., 2012). “Emergency department throughput can be either a sign of a hospital’s healthy operational efficiency or a symptom of inefficient processes and lost revenue opportunities” (McLarty & Jeffers, 2008, p. 86). The high volume of patient turnover within the ED will accentuate any inefficiencies or flaws with the patient flow process. The timeliness of discharges from

medical and surgical units is a crucial aspect in patient flow throughout an acute care facility. This movement not only makes it possible to place medical and surgical admissions from the ED, but also makes it possible to transfer patients from cardiac and critical care units thus freeing up beds that will allow the placement of those patients who are critically ill.

### **Surgical Patients**

The situation is much the same for surgical patients coming from the operating room (OR) and needing placement on a surgical unit. If there are not timely discharges in the surgical area, patients will begin to board in the post anesthesia care unit (PACU), patient flow will become gridlocked, and the OR will have to begin delaying or cancelling scheduled surgeries (Amato-Vealey et al., 2012). When surgical patient flow is interrupted, it affects the acute care facility in multiple ways including: decreased quality of care, negative impact on patient safety, physician and nurse dissatisfaction, and a reduction in revenues (Amato-Vealey et al., 2012).

The surgical units are unique in one aspect of patient flow, and that is surgeons have the ability to schedule patient procedures. The caveat to this unique aspect is that in most facilities the surgery schedule is not evenly distributed throughout the week. In conducting a patient flow process improvement initiative in one acute care facility, it was determined that delayed discharges were the main cause of breakdowns in patient flow (Amato-Vealey et al., 2012). In another study by Cowie & Corcoran, it was found that 52% of delays in placing surgical patients from PACU could be attributed to the lack of patient discharges (Cowie & Corcoran, 2012). The discharging of patients from surgical units needs to be a focus of unit staff early in the day to allow for the placement of

patients from PACU, and those patients who come into the ED needing surgical intervention.

### **Medical Patients**

The timeliness of medical discharges is affected by the condition of the patient. As many medical patients are elderly, there are more chronic illnesses that need to be addressed while admitted in the hospital. One factor that has a major impact on the timeliness of the discharge is whether or not the medical patient has cognitive impairment (Challis, Hughes, Xie, & Jolly, 2013). Another factor affecting the timeliness of the discharge is whether the patient is highly dependent on others to provide care to them (Challis et al., 2013). To set up the necessary services that the patient will need after they are discharged from the hospital will have an impact on the timeliness of the discharge, especially if there are multiple services required.

The internal process of discharging a medical patient can be a complex process requiring input and action from multiple interdisciplinary team members before the patient discharge can take place. Communication between team members plays an important role in the discharge process, and can cause delays if communication is not effective (Okoniewska et al., 2015). Establishment of clearly defined roles and responsibilities in the discharge process will increase the efficiency of the discharge process, and decrease confusion amongst staff members about who is responsible for each part of the discharge process (Okoniewska et al., 2015). Another factor affecting the timeliness of medical discharges is having the resources, both internal and external, needed to complete the discharge process. Support services needed for the patient post discharge can delay the patient discharge if there is difficulty in getting these services set

up. Internally adequate resources need to be available to complete each step in the discharge process (Okoniewska et al., 2015).

### **Empirical Literature**

A patient flow process improvement initiative was conducted in a 909 bed acute care facility in 2012 and described by Forbes et al., (2014). This process improvement initiative was designed to examine the inefficiencies in the patient flow process. Once identified committees were formed and answers on how to improve the process were sought. The first inefficiency was found to be the bed briefing in the facility. Prior to the improvement project it was a manual, time consuming process that was written on paper and the information was discarded. After completion of a process improvement initiative bed briefing is now electronic, and posted on a shared intranet site daily for everyone to review before the bed briefing. This allows the time in the bed briefing to be used to focus on barriers to patient flow instead of spending time reporting anticipated discharges, admissions, and surgeries. By converting this information to an electronic format the data can now be saved and analyzed to identify trends and metrics.

While analyzing data related to their ED admissions, Forbes et al. (2014) found that ED volumes did not have a significant impact on the number of admissions from the ED which remained constant at approximately 55 requests per day. One of the factors that was found to have an impact on the efficiency of patient placement was the occupancy level of the medical-surgical units. When this finding was revealed, the time of discharges from medical-surgical units became a focus, and it was found environmental services staffing levels were lower when the peak discharge time of 1500 arrived. A collaborative effort with the environmental services leadership team resulted

in a change in staffing levels to better match the need for services when discharges occurred most frequently.

In a study by Harrison, Zietz, Adams, & McKay (2013) the response of the medical and surgical divisions to high occupancy levels were analyzed to determine if there were a higher number of patients discharged in these divisions when occupancy levels were at critical levels. Harrison et al. (2013) determined that in the medical division when occupancy levels were at a critical stage the rate of discharges versus days when occupancy levels were not critical were statistically highly significant with  $P < 0.0001$ . Within the surgical division when occupancy levels are at a critical stage it was found there was not much statistical difference between days when occupancy levels were critical or when occupancy levels were lower with  $P = 0.169$ . The results of this study revealed that the medical division responded to critical occupancy rates with an increased number of discharges while the surgical division did not respond in the same manner and discharges remained unchanged. The timeliness of the discharges, and the effort put forth by the medical and surgical divisions within an acute care setting allow patients who are waiting to be admitted and assist in decreasing the number of patients boarding in the ED or waiting in doctor's offices as a direct admission.

In a study by Challis et al. (2013) a sample of patients who experienced delayed discharges, as defined by the Community Care Act in England, were compared with a group of patients who did not experience a delayed discharge. A total of 223 patients were identified as having had a delayed discharge. A random sample of 279 patients out of 442 patients who did not experience a delayed discharge was also taken during the data collection period as the comparison group. Data related to the discharges was

collected from three sources for the purpose of this study. The first source was basic demographic data for each patient included in the study. The second source was information related to the patient's diagnosis and hospitalization which was extracted from the electronic medical record (EMR). The third source "was manually extracted from individual case files held in the local authority by a single person with extensive knowledge of local adult social care services (Challis et al., 2013, p. 161). Statistical analysis was performed using SPSS. The results revealed that patients with cognitive impairment, or those with a high level of dependence were significantly associated with having a delayed discharge.

The study also revealed the destination of the discharged patient also played a major factor in the timeliness of the discharge. If a patient was going to be discharged to their home, or the home of a loved one, the discharge would happen in a timelier manner than it would if the patient was being discharged to a care facility. Trauma and orthopedic patients were also found to correlate with having a delayed discharge. What was not found was an association with a person's age, gender, or having a home caregiver. Not finding an association with these characteristics of patients varied from previous studies performed on this subject.

In a process improvement initiative conducted at the University Of Utah Hospitals and Clinics by Clark, patient flow and specifically patient discharges were focused on. During this study, there were over 30 barriers identified that delayed the patient being discharged with the first five being: transportation, late discharge order, patient delay, and extended care facility transportation (Clark, 2005). During the data collection phase of the study, interviews were conducted with physicians, nurses, case managers, social

workers, discharge planners, therapists, patients, unit secretaries, and others who contribute or take part in the discharging of a patient. The findings were:

- Hospital staff throughout the facility were unaware of the hospitals 11 a.m. discharge time.
- Physicians were not communicating with other departments involved in the discharge planning process to notify them of a pending discharge.
- Roles and tasks were not clearly delineated for those who were involved in the discharge planning and process.
- The discharging of patients was not felt to be a priority among staff.
- Despite the best efforts of all parties involved in the discharge process transportation delays continued to occur.
- The multi-step discharge process itself was found to increase the amount of time it took to discharge a patient.
- Medical patients were found to have a much more complex discharge process than surgical patients as surgical patients have a much more predictable plan of care making it easier to prearrange discharge care (Clark, 2005).

In a study by Powell et al. (2010), a sample of 1,927 weekday inpatient admissions and 1,622 weekday discharges were analyzed to determine if the timing of inpatient discharges affected the number of patients who had to board in the ED. A statistical model was developed and the data from the sample was plugged into the model to allow for examination of discharge practices and processes. The study revealed a strong association with the timing of inpatient discharges on ED boarding of patients. Acute care facilities continue to have high rates of occupancy which causes a bottleneck

in the ED when the timeliness of inpatient discharges does not occur. The model was then used to predict what would happen if the discharge time for these patients was shifted earlier in the day. The model predicted that if the discharge time occurred one hour earlier (2 p.m.), it would reduce the number of hours admitted patients boarded in the ED by 50%. If the discharge time of admitted patients was shifted to 11 a.m. according to the model, all boarding of admitted patients in the ED would be prevented.

A study conducted in coordination with East Lancashire Hospitals, England and the Institute of Healthcare Improvement (IHI) by Gilligan and Walters (2008) focused on improving patient flow with IHI advocating for the use of mortality rates to ensure the quality of the study. In this setting, there has been an increase in the number of medical patients being seen with suggested causes of people living longer, poor primary care infrastructure, and increasing number of co-morbidities. In this setting, it is a common practice when medical capacity reaches its limits to overflow these medical patients to the surgical unit. This does not follow the mantra of right patient, right place, and right time, and causes bottlenecks of surgical patients and decreases the clinical quality of care.

“The measures used to quantify the outcomes of the changes introduced were the daily number of medical outliers and average length of stay by ward and across medicine as a whole” (Gilligan & Walters, 2008, p. 27). “Readmission rates were monitored frequently and statistical process control (SPC) run charts were used to track weekly raw mortality” (Gilligan & Walters, 2008, p. 28). The results of the study concluded that mortality dropped from 22.9 to 17.8 patients per week. The rate of readmissions did, however, increase from a median of 5.5 to 7.5.



From a flow perspective, the process change that had the biggest impact on the medical patients was the involvement of senior medical physicians in a review of medical patients admitted to the acute care facility. This one change eliminated the need for medical patients to be overflowed to the surgical ward, and allowed for a reduction in the number of medical beds utilized. Other improvements were also made such as locating the sickest medical patients in a ward that was close to diagnostic services and close to the intensive care unit in the event support was needed for an acute condition.

“Improvements in timeliness of acute patient review, timeliness of recognition and management of deterioration and finally timeliness of discharge, not only resulted in the right patient being in the right place at the right time, but led to a more reliable health care system” (Gilligan & Walters, 2008, p. 34).

## **CHAPTER III**

### **Methodology**

The purpose of this research study was to better understand the factors affecting the timeliness in which medical and surgical patients are discharged from an acute care facility. The information obtained in this study will be used to determine actions that can assist nursing staff, case managers, physicians, and administrators to decrease the amount of time it takes to discharge medical and surgical patients.

#### **Study Design, Setting, and Sample**

This was a descriptive, qualitative study, using two focus groups (one medical focus group and one surgical focus group) to obtain perspectives of the discharge process in the respective divisions. The setting for the focus groups was the same conference room within this medium sized acute care facility which would limit any variances from the participants due to the environment in which the study was conducted. The focus group meetings were scheduled back-to-back with the medical focus group scheduled for 10 a.m. and the surgical focus group scheduled for 11 a.m. A purposive sample was selected by the primary researcher in which a personal invitation was extended to those staff members who have direct knowledge and experience with medical and surgical discharges. For each focus group a target of 6-8 participants was established.

#### **Design for Data Collection**

Following Nursing Scientific Advisory Committee (NSAC) and Institutional Review Board (IRB) approval the primary investigator (PI) approached each potential participants in person to invite them to participate in the research study. After a personal invitation was extended each potential participant was sent an e-mail invitation for a

scheduled meeting for either the medical or surgical focus group depending on the expertise and experience of each staff member. A copy of the informed consent (see Appendix) containing a detailed description of the research study was scanned and sent to each potential participant via e-mail for them to review. Once each staff member agreed to participate in the study informed consent was obtained.

The PI obtained the same conference room for each focus group, and scheduled the medical focus group meeting for 10 a.m. on July 13, 2015 and the surgical focus group to take place at 11 a.m. on July 13, 2015. Each focus group was scheduled for a period of one hour to allow ample time for open discussion and dialogue related to the discharge process. The focus group responses were to be manually recorded using Microsoft Word on a laptop to document participant responses by a research assistant. Each focus group was asked the following questions:

1. What are the barriers to a patient discharge?
2. What positive processes are in place to expedite patient discharges?
3. Describe how ancillary departments contribute to the discharge process.
4. What types of services are required by the patient after discharge?
5. What role does a patient's insurance play in the discharge process?

### **Measurement Methods**

The responses from the focus groups were transcribed by the research assistant and analyzed by the PI for themes, trends, and variances. The same conference room within the acute care facility will be used for each focus group to ensure reliability. Equivalence and internal consistency was addressed by having the PI function as a moderator for each focus group. Validity will be addressed by having only participants

who have first-hand knowledge of the discharge process participate in the research study. The mentor for qualitative, statistical support was the University's thesis faculty advisor.

### **Protection of Human Subjects**

Before conducting this study an application for the study was submitted and approved by the IRB at Carolinas Healthcare Systems and the IRB at the University. Within the application, ethical and privacy factors were addressed to ensure that the confidentiality of the participants was maintained throughout the research study. As the responses of the participants were being recorded, no names were used to identify who provided the response to the research questions, and the results of the study included no names in an effort to protect the confidentiality of the participants. There were no identified risks to the participants of the study. Benefits for the participants would be to have a better understanding of the discharge process, better understand the complexity of the discharge process, and to improve the timeliness of patient discharges in the medical and surgical divisions within this same acute care facility.

### **Data Analysis**

After the focus group sessions were conducted and the responses of the participants recorded by the research assistant the PI would then analyze the responses to identify common themes, trends, and variances.

## **CHAPTER IV**

### **Results**

The purpose of this research study was to better understand the factors affecting the timeliness in which medical and surgical patients are discharged from an acute care facility. The information obtained in this study will be used to determine actions that can assist nursing staff, case managers, physicians, and administrators to decrease the amount of time it takes to discharge medical and surgical patients.

### **Sample Characteristics**

The final sample size consisted of seven participants for the medical division and four participants for the surgical division. Participants consisted of Nurse Managers, Case Managers, and Clinical Supervisors (charge nurses) who have first-hand knowledge and experience with the discharge process. There were two nonresponses from the medical division and one withdrawal. The nonresponses in the medical division were due to patient care priorities. The withdrawal was due to a scheduling conflict in which the participant had another meeting scheduled at the same time as the focus group meeting. The surgical division had one nonresponse and one withdrawal. The nonresponse was due to the staff member not being scheduled to work on the day of the focus group meeting, and the withdrawal was due to a schedule conflict at the time the surgical focus group meeting was to take place.

### **Major Findings**

The PI asked the same five questions to both of the focus groups. Each focus group meeting lasted the entire hour allotted for the meeting. The participants in both

groups were highly engaged in the discussion and answered each of the five questions according to their own unique experiences and knowledge.

Using the responses provided by the participants, the PI was able to distinguish common themes and variances between the medical and surgical discharges. The common themes were identified by the PI conducting an intense review of the recorded responses of the participants. Qualitative analysis was utilized to study the qualitative responses given. The PI reviewed the responses multiple times to determine common themes and variances in the responses that were given by the participants.

### **Common Themes**

#### **Question #1- “What are the barriers to a patient discharge?”**

Common themes identified in the responses given to this question include equipment. The medical division stated “equipment when they need things at discharge-home health like walkers, oxygen.” The surgical division agreed with equipment also, but the equipment mentioned was not the same as in the medical division. The surgical division stated “equipment like a wound vac and other things.”

Another theme identified was a conditional discharge order written by the attending physician. The medical division gave as an example “give this medicine and let me know what their blood pressure is and then the patient can be discharged.” Another example from the medical division is “discharge order is written, but PT has to see the patient first.” The surgical division stated “getting pain under control, having to void or eat a meal can be a delay.” The surgical division did acknowledge they thought the conditional discharge issue was getting better by stating “I think it’s improved a lot with the MDs putting orders in conditional discharge.”

Having oxygen available for the patient at the time of discharge was another common theme identified by both the medical and surgical divisions. The participants from the medical division stated “O2 therapy has delays due to paperwork and getting the MD to sign order and the RN to put sats in. This can be a six hour process. Home Health has a two hour window to deliver O2 to the patient’s room. Some doctors if they know the patient is going to be discharged within 24 hours they put oxygen in their note, you have that to go by every morning.” The surgical division stated “O2 is horrible. It took us 4.5 hours to get an O2 tank delivered. It’s the distributor out of Charlotte.”

The next common theme identified was the refusal of the patient to be discharged. The medical participants made the statement “there is resistance to leave among medical patients. Patients refusing home health or facility and refuse to go home because it’s unsafe.” The surgical participants stated “sometimes the patient refuses to go and they have that right.”

Physical therapy (PT) assessments and evaluations were identified as a common theme contributing to the delay in the discharge process. The medical division stated “order for a walker at discharge, but PT has not seen the patient yet and can’t get the walker until seen by PT. PT must recommend the walker first and evaluation before a walker can be sent home. This can be a long wait because of PT availability. There is no PT coverage on weekends.” The surgical division agreed with this issue and stated “PT coverage limited on the weekends can have an impact. They (PT) are selective in who they ambulate on the weekends as a priority. Other patients may not be seen on the weekend.” Another concern of the surgical division is “patients have to walk a second time and waiting on PT in the afternoon.”

Transportation at the time of discharge was identified by both the medical and surgical divisions as a common delay to the patient discharge process. The medical division stated “family is another delay—transportation home is a barrier.” The surgical division stated “rides is one of the common themes. Transport is never there when they say they are going to be or when we set it up. One specific agency is problematic.” An additional comment from the surgical division was “It’s cultural. MDs tell the patients they can wait until the family gets there.”

The last common theme identified by both the medical and surgical participants as a barrier to the discharge process was the availability of movies to patients via the Get Well Network. The medical response included the statement “now we have cable and on demand movies and internet so people don’t want to go home.” One of the surgical participants stated “I had two patients who asked PT to come back after their movie was done. PT kindly said “no, this is what you are here for.”

## **Question #2- What positive processes are in place to expedite patient discharges?**

There were three positive common themes identified by the medical and surgical division that assisted to expedite patient discharges. The first of these common themes was the ADOD (anticipated day of discharge) rounds done at the unit level on a daily basis. The medical division stated “I think ADOD rounds have helped us be proactive. Staff nurses are thinking about discharges.” The surgical division stated “ADOD rounds moved up to 9:30 a.m., plan is discussed sooner in the day. Catching barriers sooner, gives case management more time to work on barriers.”

The second common theme was the bed management system in place at the acute care facility which is called Awarix. The medical division stated “Awarix stripes (which



signifies a pending discharge) are great. I can jump in from anywhere and see. Everyone likes it. The MDs like it, everyone likes it. More people are using it. It has changed culture.” The surgical division stated “Awarix we use it all the time.”

The third common theme identified was having the ability to give immunizations to patients at any time during their hospital admission instead of having to wait until the day of discharge. The medical unit stated “we can go ahead and give immunizations instead of waiting to last minute.” The surgical division stated “allowing immunizations to be done prior to discharge day has helped.”

**Question #3- Describe how ancillary departments contribute to the discharge process.**

There were two common themes identified in response to this question. The first common theme was related to the IV team having to place a peripheral inserted central catheter (PICC) on the day of discharge. The medical unit stated “STAT PICC orders day of discharge because people are going home. Why wasn’t this put in the day before? This isn’t a short process.” They also stated “infectious disease MD can do a better job of anticipating PICC line needs at discharge. They are stretched very thin and travel to many hospitals. Waiting for cultures to come back before they can put the PICC line in.” The surgical division did not go in depth with their response, but did state succinctly “PICC lines.”

The second common theme identified was the assistance provided by the Volunteer department located within the same acute care facility. The medical division stated “volunteers are extremely helpful. On days we don’t have volunteer the staff have to leave the floors to take people out.” The surgical division stated “PSC 1 (general

surgery unit) relies on Volunteers 98% of time for discharges.” Another comment made by the orthopedic unit was “Ortho does not rely on Volunteers due to mobility problems of patients and some of the volunteers.”

**Question #4- What types of services are required by the patient after discharge?**

In most of the responses to this question the participants focused on the barriers posed by services needed. The first service identified as a need post discharge by the medical and surgical participants was home health. The medical participants stated “home health can be a problem if the agency doesn’t have the staff available, based on the agency the patient chooses.” The surgical participants stated “sometimes home health doesn’t have the resources the patient needs.”

The next common type of service identified by both medical and surgical participants was skilled nursing facility (SNF) placement for the patient. Again, both medical and surgical participants focused on the negative aspects of the service required post discharge. The medical participants stated “SNF facilities needs the discharge summary and wait on it too. They won’t set up a transportation time to pick up the patient until the discharge summary is done. They want to know meds too and their pharmacy closes and they don’t want to use outpatient pharmacy.” The surgical unit identified SNF placement as a need for some of their patient population and stated “Skilled facility more than we have in the past.”

The last common service identified by the medical and surgical participants was the need for psychiatric placement post discharge. The medical participants stated “psych placements is a big deal. That could take a whole hour.” The surgical participants stated “we have issues with psych beds more and more.”

**Question #5- What role does a patient's insurance play in the discharge process?**

There were two common themes identified related to this question with the first being the need to get insurance approval for post discharge placement in a SNF or acute rehab and the delay this causes in the discharge process. The medical participants stated “all private insurance companies must give approval before going to any skilled facility or home health services. Some are closed over holidays. Usually doesn't happen within 24 hours though.” The surgical participants stated “insurance approval has really impacting things recently in the last four months. If we have a joint patient between acute rehab and skilled, acute looks at them first and have to start insurance. If they don't get it you have to start the entire process over with skilled and that takes several days sometimes.”

The second common theme was related to Humana which was identified as the primary insurance company handling Medicare accounts. The medical participants stated “Managed Medicare has seen some changes since we have to get authorization now compared from the straight Medicare. Like Humana. This is new and takes longer than it used to.” One of the medical participants stated “I have a good relationship with my Humana rep. and that helps.” The surgical participants stated “Humana- we all know it's going to take extra-long to take that patient out. There used to be a person in the facility but now they have to leave a voice mail.”

Table 1 summarized the common themes identified for each question.

Table 1

*Common themes*

Common Themes Identified From Each Question
<p>Question #1- What are the barriers to a patient discharge?</p> <p>Conditional discharge  Communication between staff and physicians  Equipment  O2 at discharge  Patient refusing to be discharged  PT evaluation not timely  Transportation for discharge</p> <p>Question #2- What positive processes are in place to expedite patient discharges?</p> <p>ADOD (Anticipated day of discharge) rounds  Awarix- bed management system is very visual  Giving immunizations during hospital stay instead of waiting until day of discharge</p> <p>Question #3- Describe how ancillary departments contribute to the discharge process.</p> <p>PICC placement orders at time of discharge  Volunteers assisting with patient discharges</p> <p>Question #4- What type of services are required by the patient after discharge?</p> <p>Home Health  Skilled nursing facility  Psychiatric facility placement</p> <p>Question #5- What role does a patient's insurance play in the discharge process?</p> <p>Insurance approval for post discharge placement in a skilled facility or acute rehab can delay discharge  Approval from Humana will take longer than other insurances</p>

## **Variances**

### **Question #1- What are the barriers to a patient discharge?**

The variance in responses from the medical and surgical participants were many. They both have some unique challenges that pertain to only their patient population. The medical participants stated that the day (Tuesday) the hospitalists rotated which hospitalist group was working for the week caused delays in their discharge process due to the physicians coming on shift not knowing the patients. One participant stated “change over day is on Tuesday for the hospitalist group.” Less discharges on Tuesday, more on Monday and Wednesday. If the MD is just now seeing the patient for the first time, he doesn’t want to dc the patient that day.” They also identified family medicine physicians as causing delays due to this being a residency program in which the residents have to wait on an attending physician’s approval before the patient can be discharged. One participant stated “timeliness of dc order coming in late in the day with family medicine. Residents wait on attending. Family medicine is a nightmare—we have to wait on the attending and we don’t know who the attending is and never see them.”

Another area identified by the medical participants as causing a delay in the timeliness of discharges was the attending physician and consulting physician not communicating with one another on the patient’s discharge plan. One participant stated “obstacle is the electronic medical record (EMR). If they sign off electronically and the RN never actually sees that provider then you don’t know if they are discharged. Lack of communication between MDs and nurses and consultant MDs and nurses.” Another participant stated “GI signs off—you don’t know when they will be there or if they ever signed off.” Another comment was “A patient was saying it was ok to go home, but we

had to dig through the EMR to see if the neurologist said it was ok. MD to MD and then MD to nurse call would be nice.”

The medical participants also identified the lack of a discharge summary as a barrier to a timely discharge. One participant stated “discharge summaries are huge problem on our floor 4GHJ. We can’t tell they are there. They don’t show up until they are completed by MD... it’s lost in cyber world. People who are putting these together in cyber world don’t always know which two pieces of information (confirmation number) go together and they have a high volume.” Another participant stated “there are MDs who waiting until the last minute to put discharge summaries in and we know who they are. Case Management calls them first thing in the morning to remind them to please put their discharge summaries in early and we do this every day to the same people.” An additional comment was “SNF facilities needs the DC summary and wait on it too. They won’t set up a transportation time to pick up the patient until the discharge summary is done.”

The surgical participants identified some different barriers to the timeliness of a patient discharge than their medical counterparts. One of these variances was due to increased traffic congestion on the local roads. A participant stated “traffic on the interstate on Friday afternoon’s impacts transportation on both 85 and 29. If the patient is going to the VA this can be a problem.”

Another response that varied from the medical participant responses was the regulatory requirements that needed to be met in order to discharge a patient while being compliant with all regulations mandated by federal and state agencies. A participant

stated “a lot of regulatory things hang us up. If we just were sending patients out the door, we’d do fine.”

The surgical participants identified the rounding schedule of the surgeons as a barrier to a timely patient discharge. A participant stated “they wait until after their office hours to round.” Another variance identified that also related to the surgeons was that of being territorial of the beds located on the surgical units. A participant stated “there is some territorial stuff on our orthopedic unit. Some think it’s their unit and their patients should be placed, and the neurosurgeons and thoracic vascular surgeons want all their patients on the unit. If I want to keep my patients an extra day, I should be able to do that because this is my unit. It doesn’t resonate with the MDs. “You move the other people off to get my patients in.”

Appropriate placement of a patient upon admission was also identified as a barrier to a timely discharge. An example was given by a participant as “an ortho patient is on general surgical unit.”

The surgical units identified case management as a barrier to a timely discharge for several different reasons including: “case management doesn’t get on the unit until 9 or after. We have people ready to go at 7:30. The MDs are rounding and wanting case management”, and “it would probably be for the better if they came to the unit earlier to communicate with MDs when they round.”

Supplies for ostomy patients was identified as a barrier to a timely discharge on one of the surgical units. A participant stated “ostomy patients and changes with supplies which are not provided by home health anymore, and now we have to provide the supplies, and we’ve run out of supplies.”

The last theme identified by the surgical participants was related to the pharmacy having to provide education to patients about their Coumadin regimen prior to the patient being able to be discharged. A participant stated “waiting on pharmacy to talk to patient regarding Coumadin on day of discharge.”

**Question #2- What positive processes are in place to expedite patient discharges?**

Some of the positive processes the medical participants identified were awareness of patient flow having increased from the past, and being a focus for more of the frontline staff members. The comment related to this awareness was “RNs are more aware of the patient flow culture and the importance of starting discharge early.”

Another positive process identified was the implementation and use of prediction scores for patients to assist in determining their discharge readiness, and when patients are readmissions within a short period of time. One participant stated “prediction score, readmission stuff everyone is really aware of this and it helps.”

Medical participants also felt that communication about discharge processes from one discipline to the next had shown improvement by stating “communication has improved a lot over the last few years.”

The relationship between case management and the bedside nurse was felt to be a positive influence on the expedition of patient discharges. The comment made by a participant was “nursing and case management partnership is super strong. Everyone is doing their best.”

As a goal for the nursing division a flow metric is chosen each year to promote timely discharges. For the past two years in this acute care facility the patient flow goal



has been to discharge a patient within two hours of the discharge being written by the physician. A comment related to this goal was “the 2 hour time limit has really helped.”

The surgical unit had other processes they felt positively contributed to the discharge process. Having an admission/discharge (ADT) nurse dedicated to one of the surgical units was felt to have a positive impact on the timeliness of patient discharges. This is due to this one person having a specialized skill set by focusing her practice on the admission and discharges of patients. The participant stated “with staffing the way it is now, she is our biggest asset. We’ve sacrificed a nurse at the bedside. She gets them out quickly, is detail oriented and captures a lot of things that may not get caught like duplicate meds. That expedites things. She’ll take out an IV, do discharge instructions, gather supplies, does dressings. Discharges are not a priority when you’ve got a ton of admissions coming in.”

Some of the processes PT was involved in as part of the discharge process were identified as being negative, but there were also some positive comments about PT and the discharge process. One participant stated “PT calls us in the morning and gets a list of potential discharges, and they see those patients first.” Another participant stated the use of a dry erase board and a legend to communicate information about the patient, and to list which PT therapist to call was helpful in the discharge process. The comment was “we have a board where we list assignments and discharges, using a legend to communicate what patients have going on, which specific PT is working with the patient so we can call them directly. When we have a patient who really wants to get out soon we can work with PT.”

**Question #3- Describe how ancillary departments contribute to the discharge process.**

There were both positive and negative responses from the medical participants in relation to this question. One ancillary department that was felt to affect the discharge process was the pharmacy and the part they play in providing education and filling prescriptions for patients at the time of discharge. A comment was “pharmacy does our Coumadin and does our discharge medication education on 4GHJ, just on 4GHJ (this is a pilot project).”

Along with PICC line insertions at the time of discharge another delay identified by the medical focus group involving a central line was the removal of a central line at discharge. It was stated “pulling central lines and the patient has to wait an hour before discharge.”

Some of the departments that used to be located on site at this acute care facility have now been relocated to a centralized location. With this relocation of departments processes have been effected that impact the timeliness of patient discharges. One of these departments is the microbiology portion of the lab department. A participant stated “lab has been moved off site and esp. cultures take longer now and this is where the delays are coming from.”

A positive process the medical group identified was the ability of the unit secretary to print documents from the EMR. It was stated “unit secretary being able to print our packets now, and not having to waiting on health information management (medical records) has tremendously helped.”

The medical group also identified the need of patients to speak with a disease specific nurse coordinator prior to being discharged often caused delays. The statement made was “all the diabetes and heart failure navigators that have to see the patient before they leave too.”

The surgical group identified several additional processes or issues that have a negative impact on the timeliness of the discharge process. One of the departments identified as not having coverage late enough in the day, or having adequate weekend coverage was the case management department. It was stated “not having case management afterhours, a dedicated case manager, is challenging. They are supposed to be done by 4:30, and have been told to be back in their dept. at 4:30.” In relation to weekend coverage it was stated “case management is often having to work multiple units and that can really be a problem, particularly on weekends” and “a lot more discharges are happening on Saturdays. Sustained Saturday and Sunday volumes.”

Delays with dietary and the delivery of meals to patients was also identified by the surgical group as causing a delay in the timeliness of patient discharges. Comments made were “delay with dietary. A lot our patients have to eat breakfast and lunch and if that gets pushed back.... Sometimes they’ve had surgery late the evening before, they have to wait until lunch” and “MDs are coming back later in the day to check on patient after they have eaten lunch.”

With the implementation of the Get Well Network (GWN) throughout the facility one of the options a patient will be able to choose with this interactive service is to have their discharge prescriptions filled by the on-site outpatient pharmacy prior to being discharged. This has caused some concern from the surgical group and it was stated

“how will the GWN create a barrier when patients start requesting their meds before discharge? In the past when we offered this service it impacted delay of so many discharges.”

**Question #4- What type of services are required by the patient after discharge?**

In an effort to assist patients with their discharge, and provide easy access to follow-up care post discharge a software program called RPO has been adopted. This software allows nurses in an inpatient unit to access physician clinic schedules and schedule a follow-up visit for the patient before being discharged. The impact on the timeliness of the discharge was felt to be negative by the following comments “it impacts almost every patient that leaves is the RPO, or calling the doctor takes us more time. Sometimes the office then has to call me back or call the patient back and do they have the right number? Is the patient even conscious to talk? We are waiting on them to call us back” and “RPO is slow, is not user friendly, is horrible. Offices are not in the system, it’s down, it’s slow, taking 15 minutes, still have to call, wait on hold on the phone for 10 minutes.”

Another service that was identified as a need after discharge for many patient is access to free clinics and medication programs to assist with the attainment and expense of discharge prescriptions. A participant of the medical group stated “self-pay getting them appointments and meds is difficult and takes time. Community free clinic is better now with faxing papers, but they may not have an appointment and the patient is discharged sometimes before we know they have an appointment.” Another participant stated “Logan clinic and medication assistance program is available but takes all day to work on it. Indigent meds are ready and the nurse has to go get them.”

The participants in the medical group all agreed the primary nurse is the person that is trying to coordinate the interdisciplinary effort of discharging a patient. It was stated “the person juggling all this, coordinating, calling people, looking at discharge summary, and providing excellence customer service while managing all of this is the nurse. AMAs leave out really easily (laugh). How does anyone get out of here? (laugh)”

The surgical participants had different issues than the medical participants related to services required by patients post discharge mainly due to a larger portion of their patients being discharged to an acute rehabilitation setting. It was stated “acute rehabs are full and there are no beds available. Patients are hanging out waiting.”

Another issue identified with delaying discharges involving outside organizations was patients preferring private versus semi-private rooms when placed in a SNF or an acute rehab facility. The comment made was “sometimes waiting on a private room versus a semi-private room. That’s not as common as it used to be.”

**Question #5- What role does a patient’s insurance play in the discharge process?**

The medical participants did not feel that private insurance has impacted the timeliness of a patient discharge any differently than in years past. The comment made was “nurses haven’t seen a big change in insurance processes over the past few years.”

The group did feel that patients opting to have Managed Medicare insurance has affected the timeliness of discharges due to the increased amount of regulations to be addressed prior to the discharge of a patient. It was stated “Managed Medicare has seen some changes since we have to get authorization now compared from the straight Medicare.”

The surgical participants felt that insurance companies have affected the timeliness of the discharge process and stated “there was a change that went into effect Jan 1? I can’t remember the date, but it allows them five business days that allows them to accept the patient or not? I’m not sure but case management can tell you”, “we’re at the mercy of these health insurance agencies that make up the rules as they go”, and “insurance causes a lot of delays. Is it the focus around preventing readmissions?”

Another insurance identified by the surgical participants that varied from the medical participants was Medicaid. When a patient who has Medicaid is being discharged it was felt delays were encountered due to the length of time it takes to get the needed approvals for the patient to be discharged. Comments related to Medicaid were “applying for Medicaid approval causes a delay in a patient being discharged” and “if you’ve got someone with any type of psych history and now they have a joint replacement, you have to wait on that PASRR (Preadmission Screening and Resident Review) number from the MD. This can take 5-10 days to get that number.”

Refer to Figure 2 for a summary of the differences of responses between the medical and surgical participants to each of the five questions addressed in the study.

Variances		
	Medical	Surgical
<b>Question #1- What are the barriers to a patient discharge?</b>	The day the hospitalist rotated which hospitalist group was working for the week	Increased traffic congestion on the local roads
	Family medicine delays due to residents having to wait on attending physician approval for discharges	Regulatory requirements
	Attending physician and consulting physician not communicating with one another	Rounding schedule of physicians
	Discharge summary not being completed prior to discharge	Physicians being territorial of the inpatient units
		Case management
		Ostomy supplies
		Pharmacy education related to coumadin education
<b>Question #2- What positive processes are in place to expedite patient discharges?</b>	Increased awareness and focus of frontline staff on the patient flow process	Having an admission/discharge nurse dedicated to the nursing unit
	Implementation and use of prediction scores to determine readiness for discharge	Physical Therapy prioritizing patients who are being discharged to be seen first
	Communication of discharge process from one discipline to another	
	Positive relationship between case management and bedside nurse	
	Nursing goal to discharge within 2 hours of discharge order being written	
<b>Question #3- Describe how ancillary departments contribute to the discharge process.</b>	Pharmacy providing education and filling prescriptions causes a delay in discharge	Case management availability after hours and on weekends causes a delay in discharge
	Central line removal causes delay in discharge	Dietary not providing meals in a timely manner delays discharges
	Parts of lab department being moved off-site causes delay in discharge	Filling discharge prescriptions for patients prior to being discharged causes delays
	Ability of unit secretary to print from EMR is beneficial	
	Consult with disease specific nurse navigator causes delay in discharge	
<b>Question #4- What type of services are required by the patient after discharge?</b>	Scheduling follow-up appointments using software called RPO causes a delay in discharge	Acute rehab bed availability may delay a discharge
	Access to free clinics and medication programs to provide financial assistance causes a delay in discharge	Patient preference of a private versus semi-private room when being placed in nursing facility post discharge causes a delay in discharge
	Primary nurse trying to coordinate multidisciplinary efforts to discharge	
<b>Question #5- What role does a patient's insurance play in the discharge process?</b>	No big changes in how insurance companies affect patient discharges	Insurance companies having 5 business days to make a decision on discharge placement of patient
	Managed Medicare insurance causes a delay in discharge	Medicaid patients discharge delays due to lengthy approval process

Figure 2: Variances of Responses between Medical and Surgical Units to each Question

Discussed

### **Summary**

A total of 11 participants were involved in the two focus groups. There were seven medical participants and four surgical participants. Each focus group was asked the same five questions related to the timeliness of patient discharges from their respective areas of practice. The answers to the questions were recorded by the research assistant who took notes in Microsoft Word on a laptop computer. Transcripts were reviewed multiple times by the PI, and common themes and variances were identified during this intense review.



## **CHAPTER V**

### **Discussion**

The purpose of this research study was to better understand the factors affecting the timeliness in which medical and surgical patients were discharged from an acute care facility. Two focus-groups, one consisting of participants from the medical patient care areas and one consisting of participants from the surgical patient care area, were used to obtain qualitative data on factors affecting the timeliness of patient discharges.

### **Implications of Findings**

The implication of the findings conveyed how extremely complex the process is to discharge a patient from the acute care setting. There are many different departments contributing to the timely discharge of a patient. This requires an extreme amount of coordination and communication, with the primary nurse at the center of all of this activity. There were many barriers identified in this study preventing the timely discharge of patients. Some of these barriers are unique to the different specialties, but some of the barriers are common to both specialties. There were also positive discharge processes identified by both the medical and surgical specialties which increase the efficiency in which patients are discharged.

### **Application to Theoretical/Conceptual Framework**

By looking at the common themes and variances in the responses given by the participants one can determine which factors are working to promote timely discharges and which factors are detracting from discharging a patient in a timely manner. By identifying these factors as either promoting or detracting from the discharge process, one can begin using process improvement theories and methods, such as Juran's Trilogy, to

take action to improve those factors that are detracting from the efficiency of the discharge process. Juran's Trilogy for process and quality improvement were appropriate for this study as the discharging of a patient is a complex process that requires consistency, efficiency, and coordination of multiple staff members and departments to perform this process efficiently and effectively.

### **Limitations**

One of the limitations to this study was the number of participants who provided responses from the surgical areas. There were a total of four participants for the surgical areas while the medical areas were represented by seven participants. This could have potentially limited the number of responses provided by the surgical areas in comparison to the medical area responses.

Another potential limitation to the study was the lack of a case manager to participate and contribute responses from the surgical area. The responses from the surgical participants may have been different if a surgical case manager had been present during the focus group meeting.

### **Implications for Nursing**

Nurses have many responsibilities in providing care across the continuum of healthcare. One of these responsibilities is to coordinate the discharging of patients in a timely manner while also providing high quality care, information, and education to the patient. The discharge of a patient can affect whether the patient is able to stay at their discharge location, or be readmitted to the acute care setting within a short period of time. The successful, timely discharging of patients also affects how many patients who have not received care are able to be admitted to the acute care setting to receive the medical

care they need. Nurses are at the center of the discharge process, responsible for coordinating and overseeing the discharge process to ensure it flows quickly, smoothly, and successfully. By improving the discharge process the quality of care provided increases, and the number of patients who are able to receive medical care also increases.

### **Recommendations**

The investigator will share the results of this study with the administrative and medical team at the facility in which the study was conducted to begin planning what actions need to be taken to increase the efficiency in how patients are discharged. The information obtained during this study suggested additional data needs to be collected and analyzed where barriers to the discharge process were identified.

### **Conclusion**

The discharge process is a coordinated, collaborative effort in which multiple staff members and departments contribute to. This study identified areas needing additional focus and attention to increase the efficiency of the discharge process, and also highlighted processes that positively impact the timelines of patient discharges.

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## Appendix

Focus Group Questions
1. What are the barriers to a patient discharge?
2. What positive processes are in place to expedite patient discharges?
3. Describe how ancillary departments contribute to the discharge process.
4. What types of services are required by the patient after discharge?
5. What role does the patient's insurance play in the discharge process?